ENVIRONMENTAL CHEMISTS

Date of Report: 12/23/03 Date Received: 12/11/03

Project: Metro Self Monitor, PO# M103241, F&BI 312092

Date Extracted: 12/16/03 Date Analyzed: 12/16/03

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	Nickel	<u>Zinc</u>
Laboratory ID				
M103241	0.13	0.18	0.14	< 0.05
312092-01				
		Berlinder († 1902) Berlinder		
Method Blank	< 0.05	< 0.05	< 0.10	< 0.05

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Project: Metro Self Monitor, PO# M103241, F&BI 312092

QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 312092-01 (Duplicate)

AG 11/50 \$40				Relative		
	Reporting	Sample	Duplicat	e Percent	Acceptance	e
Analyte	Units	Result	Result	Difference	Criteria	518
Chromium	mg/L (ppm)	0.13	0.13	0	0-20	ŢŪ,
Copper	mg/L (ppm)	0.18	0.17	6	0-20	
Nickel	mg/L (ppm)	0.14	0.14	0	0-20	
Zinc	mg/L (ppm)	< 0.05	< 0.05	nm	0-20	
	Chromium Copper Nickel	Analyte Units Chromium mg/L (ppm) Copper mg/L (ppm) Nickel mg/L (ppm)	Analyte Units Result Chromium mg/L (ppm) 0.13 Copper mg/L (ppm) 0.18 Nickel mg/L (ppm) 0.14	Analyte Units Result Result Chromium mg/L (ppm) 0.13 0.13 Copper mg/L (ppm) 0.18 0.17 Nickel mg/L (ppm) 0.14 0.14	Analyte Units Result Result Difference Chromium mg/L (ppm) 0.13 0.13 0 Copper mg/L (ppm) 0.18 0.17 6 Nickel mg/L (ppm) 0.14 0.14 0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

Laboratory Code: 312092-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recove MS	ry Acceptance Criteria
Chromium	mg/L (ppm)	2	0.13	89	80-120
Copper	mg/L (ppm)	2	0.18	87	80-120
Nickel	mg/L (ppm)	4	0.14	87	80-120
Zinc	mg/L (ppm)	2	< 0.05	89	80-120

Laboratory Code: Laboratory Control Sample

	Reporting	Spike %	6 Recove	ry % Recov	ery A	cceptanc	e RPI)
Analyte	Units	Level	LCS	LCSD		Criteria	(Limit	20)
Chromium	mg/L (ppm)	2	92	90		80-120	2	
Copper	mg/L (ppm)	2	93	90		80-120	3	
Nickel	mg/L (ppm)	4	92	92		80-120	2	
Zinc	mg/L (ppm)	2	91	92		80-120	1	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

. AI,

SAMPLE CHAIN OF CUSTODY

METTO SELS monitor

SAMPLERS (signature)

PROJECT NAME/NO

REMARKS

CM 12-11-03

PO#

M/03241

Page #	of
TURNAR	OUND TIME
□ Standard (2 V □ RUSH	Weeks)
Rush charges a	uthorized by:
SAMPLE	DISPOSAL
☐ Dispose after	30 days
A Return camp	los

☐ Will call with instructions

Send Report To 7. Company ALASKAN COPPER WORKS

City, State, ZIP SEATCE CA S8434

Phone # 206-782-87-78 Fax # 206-782-4709

							ANALYSES REQUESTED											
Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	CKCUME 22	, , ,				1	Notes
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Friedman & Bruya, Inc. 3012 16th Avenue West	Relinquishullh	SIGNATU	RE	5 (00	PRINT					+		£ (C)	MP.	ANY	·		DATE 7/1/63	TIME 122pm
Seattle, WA 98119-2029	Received by:	Tayt	Tan	5 10%	aw ?	\rightarrow	an				Fiec	lmo	n \$	Bri	149		11/03	1:23
Ph. (206) 285-8282	Relinquished b								***********	7	T				7	1		

Ph. (206) 285-8282

Fax (206) 283-5044

Received by

FORMS COCACUEDOC

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 23, 2003

DUPLICATE COPY

INVOICE # 03ACU1223-1

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M103241, F&BI 312092 - Results of testing requested by Gerry Thompson for material submitted on December 11, 2003.

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 23, 2003

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on December 11, 2003 from the Metro Self Monitor, PO# M103241, F&BI 312092 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Charlene Morrious

Charlene Morrow

Chemist

Enclosures ACU1223R.DOC